

Remarks

This Amendment is being filed concurrently with a Request for Continued Examination ("RCE"). Reconsideration and allowance of this application, as amended, are respectfully requested.

Claims 1 and 12 have been amended. New claims 18-20 have been added to further define the scope of protection sought for Applicants' invention. Claims 1-20 are now pending in the application. Claims 1 and 18 are independent. The rejections are respectfully submitted to be obviated in view of the amendments and remarks presented herein. No new matter has been introduced through the foregoing amendments.

Claim 1 has been amended to even more particularly define certain features of the invention. Instant claim 1 recites in pertinent part that "the torque transmission point [is] located, in an axial direction, *completely* outside the rotor." Entry of each of the amendments is respectfully requested.

35 U.S.C. § 102(b) - Meyer

Claims 1-3, 5-10, 13, 14, 16, and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,632,009 to Meyer. The Office Action states that "Meyer discloses an extruder device comprising an extruder worm (2) and a worm drive (3') including a drive motor (4') which includes a rotor (11 or

alternatively 11 + 8) . . ." (Office Action page 2, numbered paragraph 2).

The rejection under § 102(b) based on Meyer is respectfully deemed to be obviated. For at least the following reasons, the disclosure of Meyer does not anticipate Applicants' presently claimed invention.

By way of review, a stated object of the instant invention "is to improve a prior art gearless extrusion device in such a manner that the torque-transmitting elements are easier to access" (specification page 2, lines 1-2). Accordingly, to provide the desired access, "the torque-transmitting elements in the axial direction are located outside the rotor" (specification page 2, lines 6-7). As a result, "the torque-transmitting elements are easy to reach without having to remove the hollow shaft motor with its outer stator and internal rotor" (specification page 2, lines 7-9).

To even more particularly define the location of the torque transmission point, instant claim 1 now recites that "the torque transmission point [is] located, in an axial direction, completely outside the rotor." See, e.g., instant Figure 1, which clearly shows that bushing 14 and connecting section 6 are located completely outside rotor 8.

Meyer's extruder drive is structurally different in several ways from Applicants' presently claimed invention. But before turning to an explanation of the differences, Applicants wish to point out a problem with the Office Action's

characterization of Meyer's device. As indicated above, the Office Action states that "Meyer discloses an extruder device comprising an extruder worm (2) and a worm drive (3') including a drive motor (4') which includes a rotor (11 or alternatively 11 + 8)." Applicants respectfully disagree. Meyer actually discloses that element 8 is "a cylindrical sleeve-shaped rotor 8" (column 2, lines 54-55) and that element 11 is "an end plate 11" (column 2, lines 66-67).

One requirement of claim 1 is that "the detachable torque-transmitting elements includ[e] a torque transmission point at which torque is transmitted from a bushing fastened on a face side of the rotor to a connecting section." The instant specification defines the "connecting section" as "any continuation or extension of the extruder worm" (specification page 2, lines 9-10). Meyer discloses a "rear end extension 9" of screw 2 (column 2, line 55; Figure 2). From Figure 2, it is evident that Meyer's extension 9 is surrounded by sleeve 10. Meyer discloses that extension 9 and sleeve 10 are connected as shown in Figures 3 and 4, which is known as a "key and slot joint." That means that the key and slot joint, which extends over the full length of sleeve 10, would develop a "torque transmission point" in the sense that the terminology is used in the instant application.

From Meyer's Figure 2, it is evident that the torque transmission point therefore lies *inside the major part of rotor 8*. As mentioned above, only element 8 is the rotor. From Meyer's

Figure 2 it is clear that rotor 8 surrounds a major part of both extension 9 and sleeve 10. However, according to Applicants' presently claimed invention, "the torque transmission point [is] located, in an axial direction, *completely* outside the rotor." Meyer, therefore, most certainly does not meet the aforementioned feature of the presently claimed invention.

And, it is important to note that Meyer's plate 11 is connected in a *torque proof* way to sleeve 10. That is, Meyer discloses that "[t]he rear end of this sleeve 10 is secured by bolts 15 to an end plate 11 . . ." (column 2, lines 65-67). Although Meyer teaches that central hole 14 "is covered by a plate 19 secured to the end of the extension 9" (column 3, lines 8-9), this is certainly not a connection by which torque can be transmitted. Therefore, Meyer's plate 11 cannot be regarded as being connected to extension 9.

Meyer, therefore, fails to teach each of the elements of Applicants' presently claimed extruder device. Since Meyer does not meet each feature of the claimed invention, Meyer does not anticipate the invention defined by Applicants' instant claim 1. Claims 2, 3, 5-10, 13, 14, 16, and 17 are allowable because they depend, either directly or indirectly, from claim 1, and for the subject matter recited therein.

35 U.S.C. § 103(a) - Meyer

Claims 4, 11, 12, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Meyer.

The rejection of claims 4, 11, 12, and 15 under § 103(a) based on Meyer is also respectfully deemed to be obviated. Each of claims 4, 11, 12, and 15 depends, either directly or indirectly, from claim 1. Claim 1 is allowable over Meyer for at least the reasons outlined above in response to the rejection under § 102(b). Claims 4, 11, 12, and 15 are allowable because they depend from claim 1, and for the subject matter recited therein.

Furthermore, there is simply no teaching in Meyer that would have led one to modify the reference in a way that would result in the various embodiments of the invention defined by any of Applicants' pending claims.

New claims 18-20 have been added to further define the scope of protection sought for Applicants' invention. New claims 18-20 are also allowable. Claim 18 defines an embodiment of the extruder device in which "the detachable torque-transmitting elements (i) [are] arranged between the motor and the extruder worm and (ii) includ[e] a torque transmission point at which torque is transmitted from a bushing fastened on a face side of the rotor to a connecting section that is at least partially encompassed by the bushing, the torque transmission point, the bushing, and the connecting section being located, in an axial direction, completely outside the rotor. The disclosure of Meyer fails to meet, *inter*

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alia, each of the aforementioned requirements of the embodiment of the extruder device defined by claim 18.

In view of the foregoing, this application is now in condition for allowance. If the examiner believes that an interview might expedite prosecution, the examiner is invited to contact the undersigned.

Respectfully submitted,

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